

4. (amended) The catalyst according to claim 1, wherein the content of said main catalyst, palladium metal, based on the weight of said porous carrier, is in the range of 0.3 to 1.5 weight %.

6. (amended) The catalyst according to claim 1, wherein the content of said promoter, tin metal, based on the weight of said porous carrier, is in the range of 0.02 to 1.0 weight %.

8. (amended) The catalyst according to claim 1, wherein the total content of said promoter, tin metal and gold metal, based on the weight of said porous carrier, is in the range of 0.02 to 1.0 % by weight.

9. (amended) The catalyst according to claim 1, wherein the content of said alkali compound, based on the weight of said porous carrier, is in the range of 1 to 15 weight %.

10. (amended) The catalyst according to claim 9, wherein the content of said alkali compound, based on the weight of said porous carrier, is in the range of 4 to 10 weight %.

Kindly cancel claims 2, 3, 5, 7, 11, 12, 13, and 23-40 without prejudice or disclaimer.

REMARKS

Claims 1-40 are pending in this application. Claim 1, 4, 6, 8, 9, and 10 have been amended. Claims 2, 3, 5, 7, 11-13, and 23-40 have been cancelled herein without prejudice to their subsequent presentation in this, or a related application. No new matter has been introduced by virtue of the amendments made to the claims. For instance, support for the amended claims appears in Table 1 in the specification and in Example 1.

It also is submitted that the within amendments may be properly entered at this time, i.e. after final rejection, pursuant to 37 CFR §1.116, because the amendments do not raise any new issues or require a new search, and they reduce issues for appeal. Indeed, it is believed that the

within amendments place the application in condition for allowance. Accordingly, entry of the within amendments is earnestly solicited at this time.

Claim 25 was rejected under 35 U.S.C. § 112, second paragraph. Claim 25 was indicated to be indefinite on the basis that it is not clear whether a use limitation limits a process of making the catalyst.

Claim 25 has been cancelled by the instant amendment without prejudice or disclaimer.

It is thus believed the rejection has been obviated.

Claims 1-16 and 23 were rejected under 35 U.S.C. §102(b) over Bartsch (U.S. Patent 4,158,737).

Claims 20 and 21 were rejected under 35 U.S.C. §103(a) over Bartsch (U.S. Patent 4,158,737) in view of Sennewald (U.S. Patent 3,655,747).

Claim 22 was rejected under 35 U.S.C. §103(a) over Bartsch (U.S. Patent 4,158,737) and Sennewald (U.S. Patent 3,655,747) and further in view of Kronig et al. (U.S. Patent 3,822, 308).

For the sake of brevity, the three § 102 and § 103 rejections are addressed in combination. Such a combined response is considered appropriate because *inter alia* each of the rejections relies on the Bartsch patent as the sole or primary citation. Each of the rejections is traversed.

Each of the Applicants' claims calls for a catalyst that contains palladium, gold, and tin in combination with an alkali metal compound. The catalysts do not contain an additional metal species. See claim 1 as amended.

The experimental data disclosed in the application as filed shows clearly superior catalytic activity and durability for catalysts of the invention that contain a combination of tin and gold without an additional transition metal. See pages 7 to 12 of the application including the Table on page 11.

The Bartsch patent, whether considered alone or in combination with the other cited documents, fails to teach or otherwise suggest Applicants' claimed invention, or the significant performance advantages provided thereby.

Among other things, Bartsch does not disclose the use of a combination of tin and gold as a catalyst promoter as Applicants disclose and claim. Bartsch also does not disclose the use of catalysts comprising palladium, gold, tin and an alkali metal salt on a porous carrier in the absence of additional metals.

The Office Action alleges that Bartsch teaches catalyst compositions comprising palladium metal and a mixture of tin and additional metals as the promoter. See page 4, paragraph 6. However, Bartsch neither discloses nor suggests that addition of a combination of optional metal additives would be desirable. Moreover, Bartsch merely provides a laundry list of potential optional additives, but neither discloses nor suggests that a combination of gold and tin would provide superior catalytic activity.

Sennewald merely recites a method of reductive deposition of metals onto a particle surface using hydrazine as the reductant. Kronig teaches the use of ethylene gas at elevated temperature to reduce a mixture of palladium and gold salts to metallic palladium and gold. The disclosures of Sennewald and Kronig are not sufficient to overcome the limitations of Bartsch.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE
(Additions are underlined and deletions are bracketed)

IN THE CLAIMS

1. (amended) A catalyst for oxacylation to produce allyl acetate, which comprises 0.1 to 5.0 weight % of palladium metal as the main catalyst, gold metal, and 0.01 to 5.0 weight % of tin metal [or a mixture of tin and additional metal(s)] as the promoter, based on the weight of a porous carrier, in combination with an alkali [or alkaline earth] metal compound, supported on the outer surface of said porous carrier, wherein the total content of gold metal and tin metal is in the range of 0.01 to 5.0 weight % [and being used in the process for producing allyl acetate].
4. (amended) The catalyst according to claim [3] 1, wherein the content of said main catalyst, palladium metal, based on the weight of said porous carrier, is in the range of 0.3 to 1.5 weight %.
6. (amended) The catalyst according to claim [5] 1, wherein the content of said promoter, tin metal, based on the weight of said porous carrier, is in the range of 0.02 to 1.0 weight %.
8. (amended) The catalyst according to claim [7] 1, wherein the total content of said promoter, tin metal and gold metal [additional promoter metal(s)], based on the weight of said porous carrier, is in the range of 0.02 to 1.0 % by weight.
9. (amended) The catalyst according to claim 1, wherein the content of said alkali [or alkaline earth metal] compound, based on the weight of said porous carrier, is in the range of 1 to 15 weight %.
10. (amended) The catalyst according to claim 9, wherein the content of said alkali [or alkaline earth metal] compound, based on the weight of said porous carrier, is in the range of 4 to 10 weight %.